

\$1.95

QUICK REFERENCE CHART

**FOR
ATARI^(TM)
400/800**

**Compiled By
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ERROR CODES

- 2 MEMORY INSUFFICIENT
- 3 VALUE ERROR
- 4 TOO MANY VARIABLES
- 5 STRING LENGTH ERROR
- 6 OUT OF DATA
- 7 NUMBER GREATER THAN 32767
- 8 **INPUT** STATEMENT ERROR
- 9 ARRAY OR STRING **DIM** ERROR
- 10 ARGUMENT STACK OVERFLOW
- 11 FLOATING POINT OVER/UNDER FLOW
- 12 LINE NOT FOUND
- 13 NO MATCHING **FOR** STATEMENT
- 14 LINE TOO LONG
- 15 **GOSUB** OR **FOR** LINE DELETED
- 16 **RETURN** WITHOUT **GOSUB**
- 17 GARBAGE ERROR
- 18 INVALID STRING CHARACTER
- 19 LOAD PROGRAM TOO LONG
- 20 DEVICE NUMBER ERROR
- 21 LOAD FILE ERROR
- 128 BREAK ABORT
- 129 IOCB ERROR
- 130 NON-EXISTENT DEVICE
- 131 IOCB WRITE ONLY
- 132 INVALID COMMAND
- 133 DEVICE OR FILE NOT OPEN
- 134 BAD IOCB NUMBER
- 135 IOCB READ ONLY
- 136 EOF REACHED
- 137 TRUNCATED RECORD
- 138 DEVICE TIMEOUT
- 139 DEVICE NAK ERROR
- 140 SERIAL BUS ERROR
- 141 CURSOR OUT OF RANGE
- 142 SERIAL BUS DATA FRAME OVERRUN
- 143 SERIAL BUS DATA FRAME CHECKSUM
- 144 DEVICE TIME (WRITE PROTECTED)
- 145 READ AFTER WRITE COMPARE ERROR
- 146 FUNCTION NOT IMPLEMENTED
- 147 INSUFFICIENT RAM
- 160 DRIVE NUMBER ERROR
- 161 TOO MANY FILES OPEN
- 162 DISK FULL
- 163 UNRECOVERABLE SYSTEM DATA I/O
- 164 FILE NUMBER MISMATCH
- 165 FILE NAME ERROR
- 166 POINT DATA LENGTH ERROR
- 167 FILE LOCKED
- 168 COMMAND INVALID
- 169 DIRECTORY FULL
- 170 FILE NOT FOUND
- 171 POINT INVALID

EDITOR ASSEMBLER CARTRIDGE ERRORS:

- 1 Memory insufficient for application
- 2 Values for DEL command illegal
- 3 (Mini Assembler) address error
- 4 File cannot be loaded
- 5 Undefined label reference
- 6 Syntax error
- 7 Duplicate label
- 8 Buffer overflow
- 9 Not label or * before =
- 10 One byte value greater than 255
- 11 Invalid null string usage

ASSEMBLER MNEMONICS

ADC	Add Memory to Accumulator with Carry
AND	AND Accumulator with Memory
ASL	Shift Left (Accumulator or Memory)
BCC	Branch if Carry Clear
BCS	Branch if Carry Set
BEG	Branch if Result = Zero
BIT	Test Memory against Accumulator
BMI	Branch if Minus Result
BNE	Branch if Result \neq Zero
BPL	Branch on Plus Result
BRK	Break
BVC	Branch if V Flag Clear
BVS	Branch if V Flag Set
CLC	Clear Carry Flag
CLD	Clear Decimal Mode Flag
CLI	Clear Interrupt Disable Flag (Enable Interrupt)
CLV	Clear V Flag
CMP	Compare Accumulator and Memory
CPX	Compare Register X and Memory
CPY	Compare Register Y and Memory
DEC	Decrement Memory
DEX	Decrement Register X
DEY	Decrement Register Y
ECR	Exclusive OR Accumulator with Memory
INC	Increment Memory
INX	Increment Register X
INY	Increment Register Y
JMP	Jump to New Location
JSR	Jump to Subroutine

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- 12 Illegal address or address type
 - 13 Phase error: Pass 1 results different
from Pass 2
 - 14 Undefined forward reference
 - 15 Line too long
 - 16 Illegal source statement
 - 17 Line number too large
 - 18 LOMEM command used after other
command usage
 - 19 No starting address (origin)
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LDA	Load Accumulator
LDX	Load Register X
LDY	Load Register Y
LSR	Shift Right (Accumulator or Memory)
NOP	No Operation
ORA	Or Accumulator with Memory
PHA	Push Accumulator on Stack
PHP	Push Processor Status Register (P) onto Stack
PLA	Pull Accumulator from Stack
PLP	Pull Processor Status Register (P) from Stack
ROL	Rotate Left (Accumulator or Memory)
ROR	Rotate Right (Accumulator or Memory)
RTI	Return from Interrupt
RTS	Return from Subroutine
SBC	Subtract Memory from Accumulator with Borrow
SEC	Set Carry Flag
SED	Set Decimal Mode Flag
SEI	Set Interrupt Disable Flag (Disable Interrupt)
STA	Store Accumulator
STX	Store Register X
STY	Store Register Y
TAX	Transfer Accumulator to Register X
TAY	Transfer Accumulator to Register Y
TSX	Transfer Register SP to Register X
TXA	Transfer Register X to Accumulator
TXS	Transfer Register X to Register SP
TYA	Transfer Register Y to Accumulator

ABBREVIATIONS

RESERVED WORD

ABBREVIATED WORD

BYE	B.
CLOAD	CLOA.
CLOSE	CL.
COLOR	C.
CONT	CON.
DATA	D.
DEG	DE.
DIM	DI.
DOS	DO.
DRAWTO	DR.
ENTER	E.
FOR	F.
GET	GE.
GOSUB	GOS.
GOTO	G.
GRAPHICS	GR.
INPUT	I.
LET	LE.
LIST	L.
LOAD	LO.
LOCATE	LOC.
LPRINT	LP.
NEXT	N.
NOTE	NO.
OPEN	O.
PLOT	PL.
POINT	P.
POKE	POK.
POSITION	POS.
PRINT	PR. or ?
PUT	PU.
READ	REA.
REM	R. or .(space)
RESTORE	RES.
RETURN	RET.
RUN	RU.
SAVE	S.
SETCOLOR	SE.
SOUND	SO.
STATUS	ST.
STOP	STO.
TRAP	T.
XIO	X.

EXTENDERS

EXTENDER

MEANING

.SYS	SYSTEM FILE
.BAS	BASIC FILE
.DAT	DATA FILE
.MUS	MUSIC FILE
.ASM	ASSEMBLY LANGUAGE FILE
.OBJ	BINARY LOAD FILE
.SRC	SOURCE FILE
.CMD	LOAD AND GO FILE
.LST	LIST FILE
.SAV	SAVE FILE

XIO COMMANDS

XIO COMMAND, #IOCB,AUX1,AUX2,FILESPEC

COMMAND	OPERATION
3	OPEN
5	GET RECORD
7	GET CHARACTER
9	PUT RECORD
11	PUT CHARACTER
12	CLOSE
13	STATUS REQUEST
32	RENAME
33	DELETE
35	LOCK FILE
36	UNLOCK FILE

#IOCB = Channel Number

AUX1	OPERATION
4	INPUT
6	DISK DIRECTORY
8	OUTPUT
9	EOF APPEND
12	INPUT/OUTPUT

AUX2	OPERATION
83	820 SIDEWAYS

FILESPEC	OPERATION
"D:"	DISK
"C:"	CASSETTE
"P:"	PRINTER
"S:"	SCREEN
"E:"	GRAPHIC SCREEN
"R:"	RS232-PORT

WILD CARD USAGE

	MENU OPTION	ALLOWED
A.	DISK DIRECTORY	YES
B.	RUN CARTRIDGE	NO
C.	COPY FILE	YES
D.	DELETE FILE	YES
E.	RENAME FILE	YES
F.	LOCK FILE	YES
G.	UNLOCK FILE	YES
H.	WRITE DOS FILE	NO
I.	FORMAT DISK	NO
J.	DUPLICATE DISK	NO
K.	BINARY SAVE	NO
L.	BINARY LOAD	NO
M.	RUN AT ADDRESS	NO
N.	CREATE MEM.SAV	NO
O.	DUPLICATE FILE	YES

JOYSTICK CONTROL



X = FRONT PORT #
JOYSTICK = STICK (X)
BUTTON = STRIG (X)

PADDLE CONTROL

Far right read = 1
Far left read = 228

PADDLE AND JOYSTICK BUTTON CONTROL

Both read a 0 (zero) if button is pushed.

X = FRONT PORT #
PADDLE = PADDLE (X)
TRIGGER = PTRIG (X)

COLOR NUMBERS

0 = GRAY	9 = LIGHT BLUE
1 = LIGHT ORANGE	10 = TURQUOISE
2 = ORANGE	11 = GREEN—BLUE
3 = RED—ORANGE	12 = GREEN
4 = PINK	13 = YELLOW—GREEN
6 = PURPLE—BLUE	14 = ORANGE—GREEN
7 = BLUE	15 = LIGHT ORANGE
8 = BLUE	

GRAPHIC MODE INFORMATION

+ (16) = FULL SCREEN

+ (32) = CLEAR SCREEN SURPRESS

MODE	SCREEN	HORZ COL
0	TEXT	40
1	TEXT	20
2	TEXT	20
3	GRAPHIC	40
4	GRAPHIC	80
5	GRAPHIC	80
6	GRAPHIC	160
7	GRAPHIC	160
8	GRAPHIC	320

MUSICAL PITCHES

NOTE	PITCH	NOTE	PITCH
HIGH RANGE		F	91
C (HIGH C)	29	E	96
B	31	D# or Eb	102
A# or Bb	33	D	108
A	35	C# or Db	114
G# or Ab	37	MID RANGE	
G	40	C (MIDDLE C)	121
F# or Gb	42	B	128
F	45	A# or Bb	136
E	47	A	144
D# or E	50	G# or Ab	153
D	53	G	162
C# or Db	57	F# or Gb	173
C	60	F	182
B	64	LOW RANGE	
A# or B	68	E	193
A	72	D# or Eb	204
G# or Ab	76	D	217
G	81	C# or Db	230
F# or Gb	85	C (LOW C)	243

VERT SPLT	VERT FULL	# CLRS	RAM REQ
N/A	24	2	993
20	24	5	513
10	12	5	261
20	24	4	273
40	48	2	537
40	48	4	1017
80	96	2	2025
80	96	4	3945
160	192	1/2	7900